VPR-722

SERVICE MANUAL

SPECIFICATIONS

Power requirements	28V dc (supplied from the projector)
Power consumption	2.0 W max.
Dimensions	Approx. 430 × 55 × 235 mm (w/h/d) (17 × 1 3/4 × 9 1/4 inches)
Weight	Approx. 2.1 kg (4 lb 10 oz)

Input/output

Signal	Connector	Signal level	Remarks
Video in	[VTR] 8-pin (pins 2 & 6) [TUNER] 8-pin (pins 8 & 6) [VIDEO] BNC [VIDEO] phono	1V (p-p) ±0.2V	75 ohms sync negative
Video out	[MONITOR OUT] BNC	1V (p-p) ±0.2V	75 ohms sync negative
Audio in	[VTR] 8-pin (pins 1 & 5) [AUDIO] phono [TUNER] 8-pin (L1, R3) & (4, 5, 7)	−5dBs (436mV rms)	47 kilohms
Audio out	[MONITOR OUT] mini [AUDIO OUT] phono	−5dBs (436mV rms)	1 kilohms
Control out	[TO PROJECTOR] 14-pin (pin 14)	+12V (POWER ON)	
	[CONTROL] mini	<CONTROL 1> +5V	High impedance
		<CONTROL 2> ±0V	High impedance

— Continued on next page —

REMOTE CONTROLLER

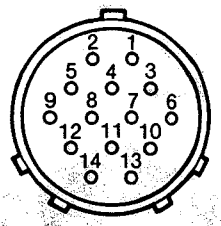
SONY®

MICROFILM

ACC

TO PROJECTOR connector

14-pin socket
For connecting
the VPH-722Q/722QM/1020Q/1020QM
color video projector



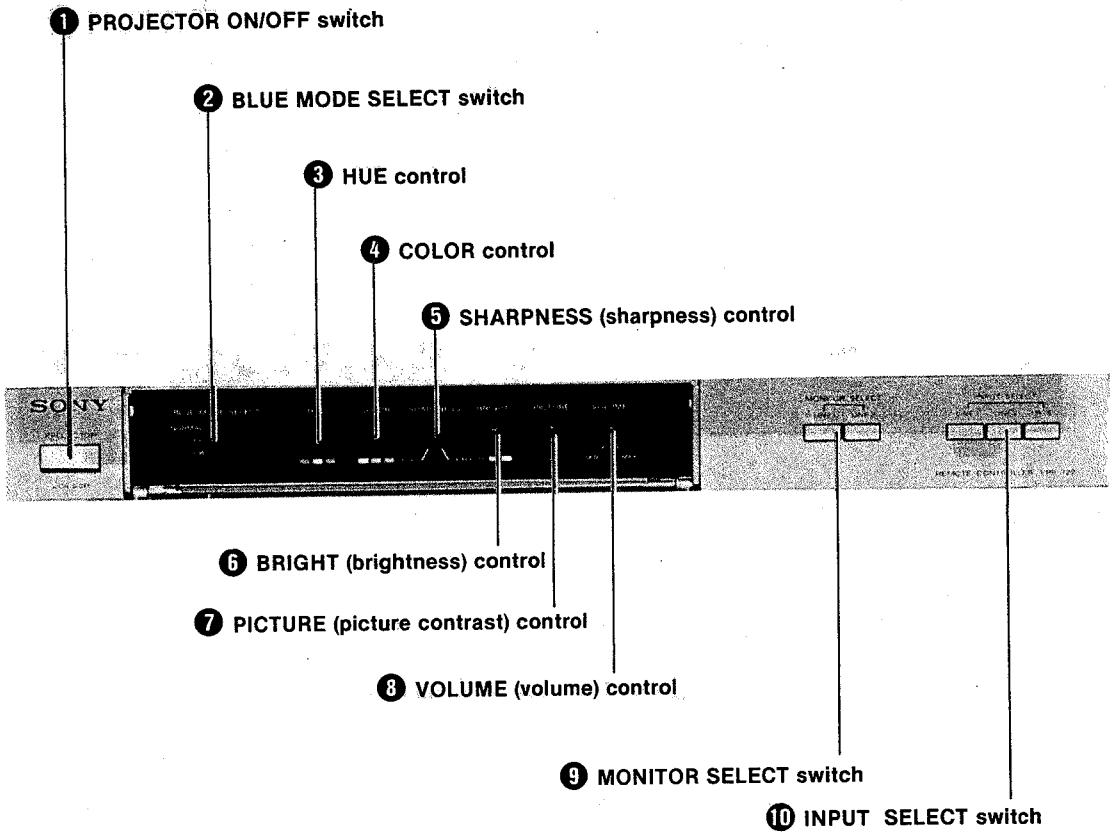
Pin No.	Signal	Pin No.	Signal
1	Ground	8	Input select
2	+28V ⎓ 60mA	9	Audio (incl. volume control)
3	Hue 1	10	Brightness
4	Hue 2	11	Sharpness
5	Hue 3	12	Color
6	Video	13	Picture
7	Ground (video)	14	Power ON: 12V, OFF: 0V

Design and specifications subject to change without notice.

SECTION 1
GENERAL

1-1. LOCATION AND FUNCTION OF CONTROLS

Front


❶ PROJECTOR ON/OFF switch
❷ BLUE MODE SELECT switch
❸ HUE control
❹ COLOR control
❺ SHARPNESS (sharpness) control
❻ BRIGHT (brightness) control
❼ PICTURE (picture contrast) control
❽ VOLUME (volume) control
❾ MONITOR SELECT switch
❿ INPUT SELECT switch

❶ PROJECTOR ON/OFF switch
When the POWER switch of the projector is depressed, press to turn the projector on or off.

❷ BLUE MODE SELECT switch
This switch is effective only for RGB inputs connected to the projector.
Usually set to NORMAL. Set to BB (blue background) to change the black background of the display to blue, and to CB (clear blue) to lighten blue part of the display.
The display should become easier to view.

❸ HUE control
❹ COLOR control
❺ SHARPNESS control
❻ BRIGHT (brightness) control
❼ PICTURE (picture contrast) control

Adjust the projected picture as desired. The picture of the connected video monitor is to be adjusted with these controls on the monitor.

❸ ❹ ❺ controls do not function for RGB inputs.

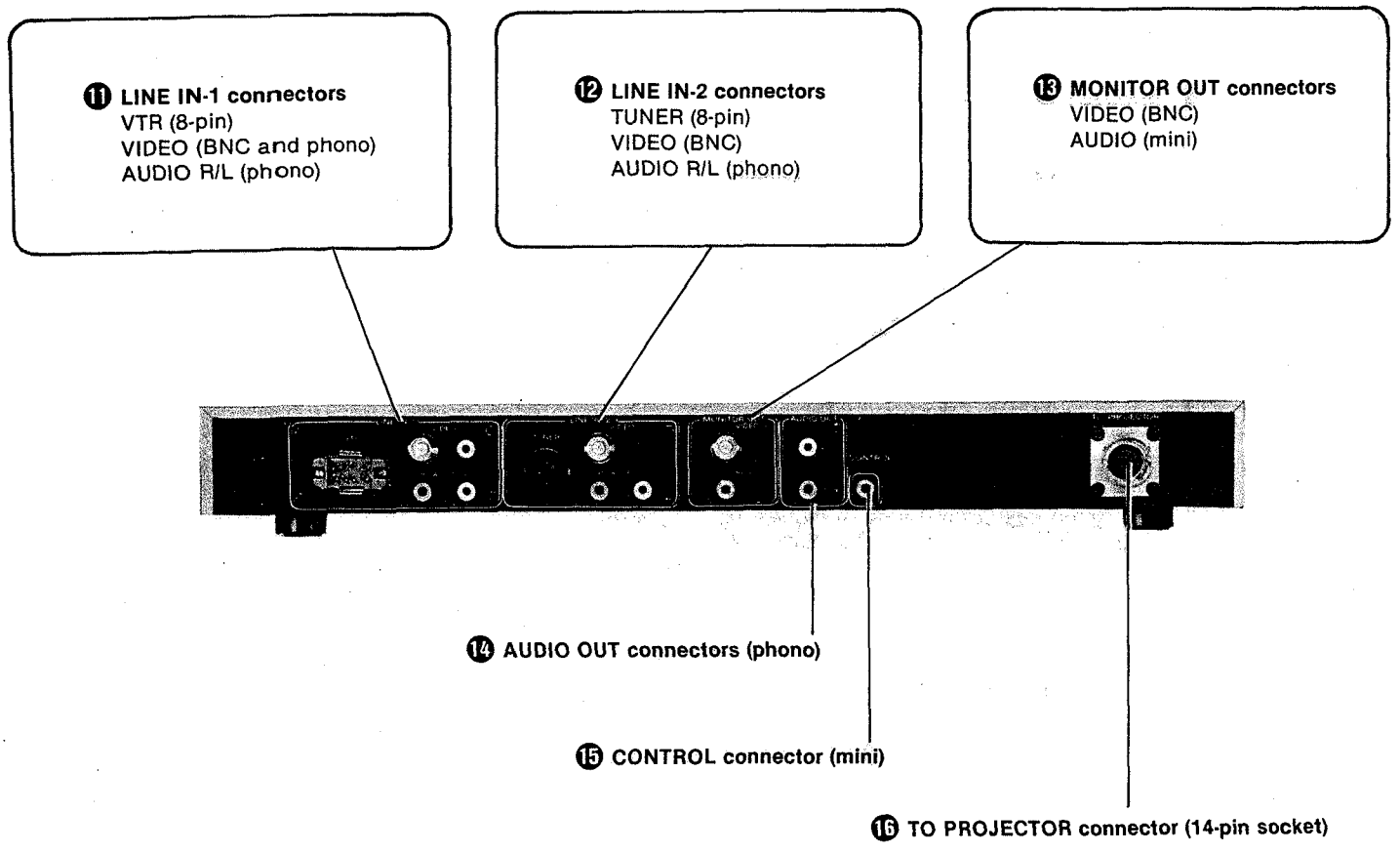
To project RGB inputs of TTL level in better condition, slightly darken the display by turning the PICTURE and BRIGHT controls counterclockwise.

❽ VOLUME control
Adjusts the sound volume of the projector. The volume of the connected video monitor is to be adjusted with the control on the monitor.

❾ MONITOR SELECT switch
Selects the output signal from the MONITOR OUT connectors.

❿ INPUT SELECT switch
Selects the input signal to be projected on the screen.

Rear



⓫ LINE IN-1 connectors

Connect a video cassette recorder here.

VTR (8-pin): to connect to a VTR equipped with an 8-pin TV connector

VIDEO (BNC and phono) } to connect to a VTR, video camera, etc.
AUDIO R/L (phono) } equipped with video/audio line outputs

Caution:

- Do not simultaneously use both sets of connectors.
- Do not simultaneously use both BNC and phono connectors to connect a VTR.
- Do not connect a TV tuner equipped with an 8-pin connector as the functions of these pins are different from those of the 8-pin connector on this unit.

⓬ LINE IN-2 connectors

TUNER (8-pin): to connect to a TV tuner equipped with an 8-pin multi connector

VIDEO (BNC) } to connect to a VTR, video camera, etc.
AUDIO R/L (phono) } equipped with video/audio line outputs

Caution: Do not simultaneoulsy use both sets of connectors.

⓭ MONITOR OUT connectors

VIDEO (BNC)
AUDIO (mini)

Connect a color video monitor equipped with video/audio inputs. The program source slected by the MONITOR SELECT switch can be seen on the monitor.

⓮ AUDIO OUT connectors (phono)

Connect an audio equipment, such as a stereo amplifier, to these connectors to listen to the sound selected by the INPUT SELECT switch with the audio system.

⓯ CONTROL connector (mini)

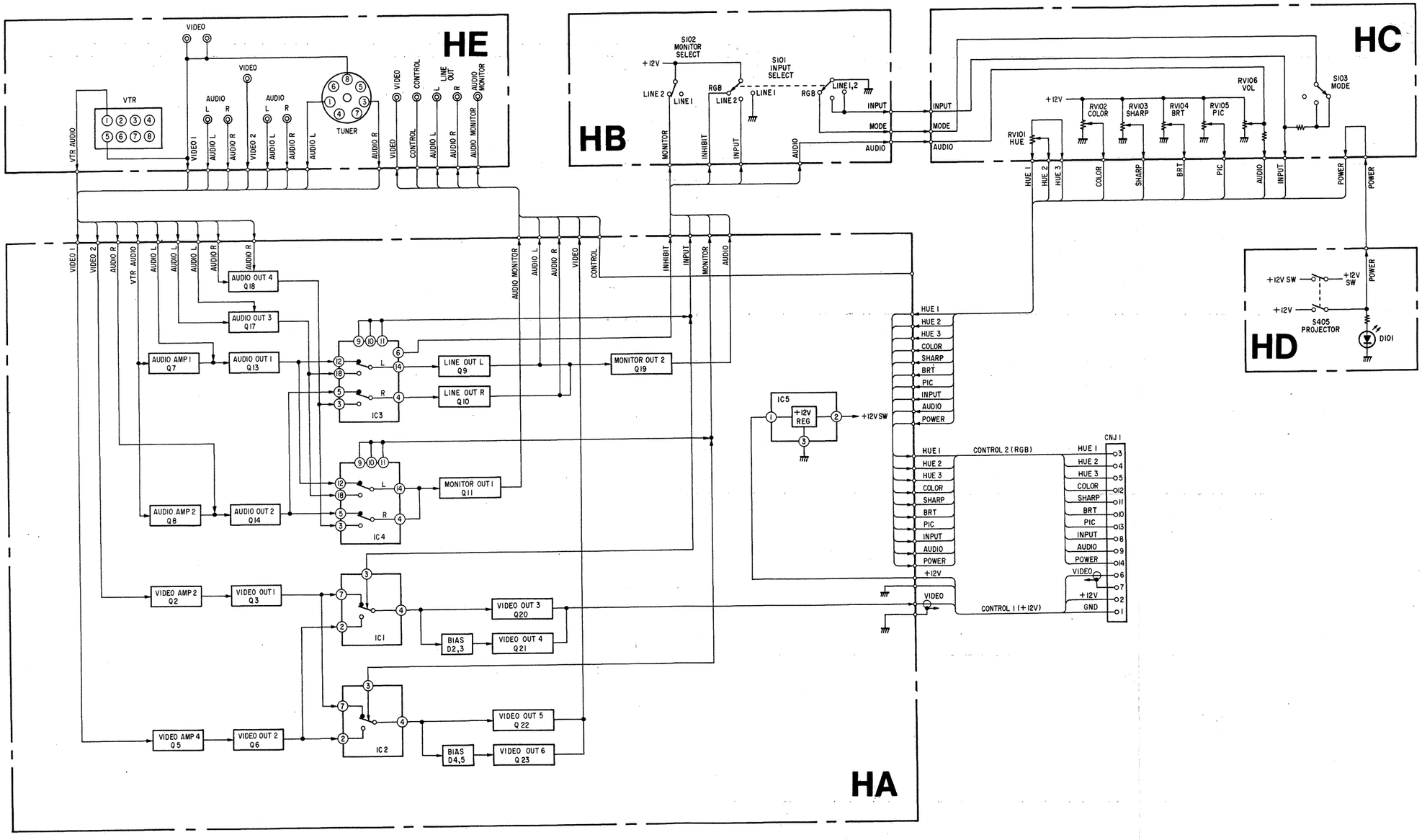
Provides a control signal of 5V. Use to remotely control the screen's opening and closing, the lighting condition of the room, etc.

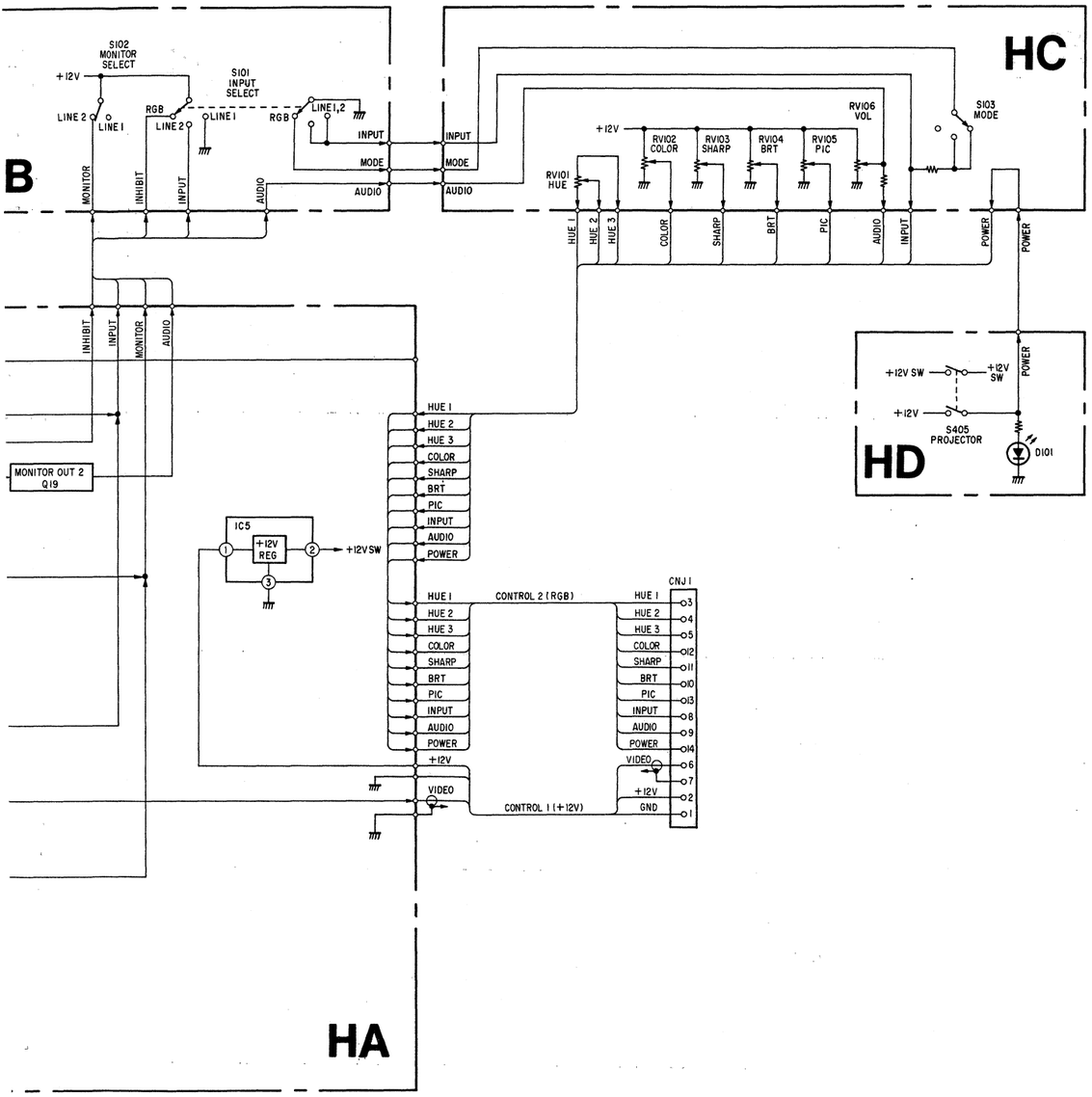
⓰ TO PROJECTOR connector (14-pin socket)

Connect the Sony VPH-722Q, 722QM, 1020Q or 1020QM color video projector to this connector.

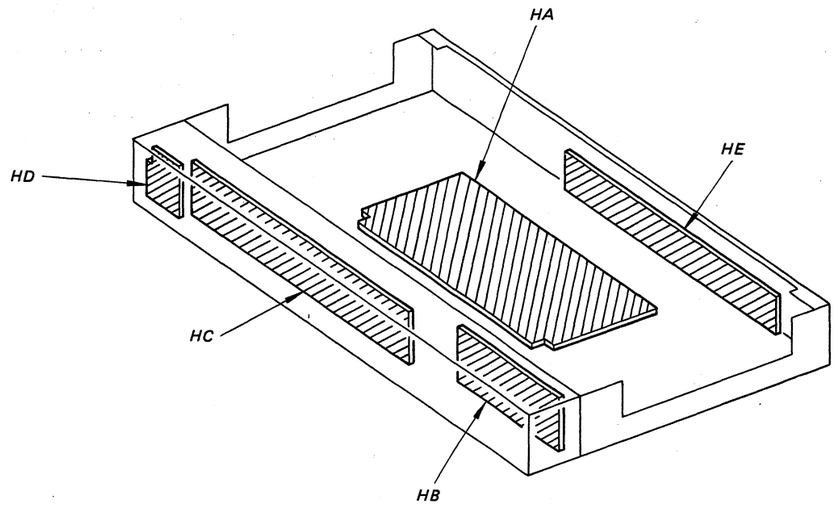
SECTION 2
DIAGRAMS AND CIRCUIT BOARDS LOCATION

2-1. BLOCK DIAGRAM





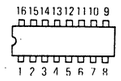
2-2. CIRCUIT BOARDS LOCATION



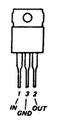
2-3. SEMICONDUCTORS

CX20061

HD14053BP
TC4053BP



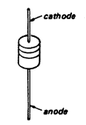
μPC78M12H



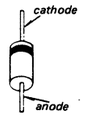
2SA1048
2SA1115
2SC2458
2SC2603

2SA1175
2SC2785

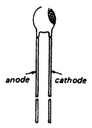
1SS119
1SS120
1SS148



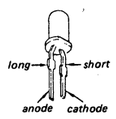
1SS133



MV11VS



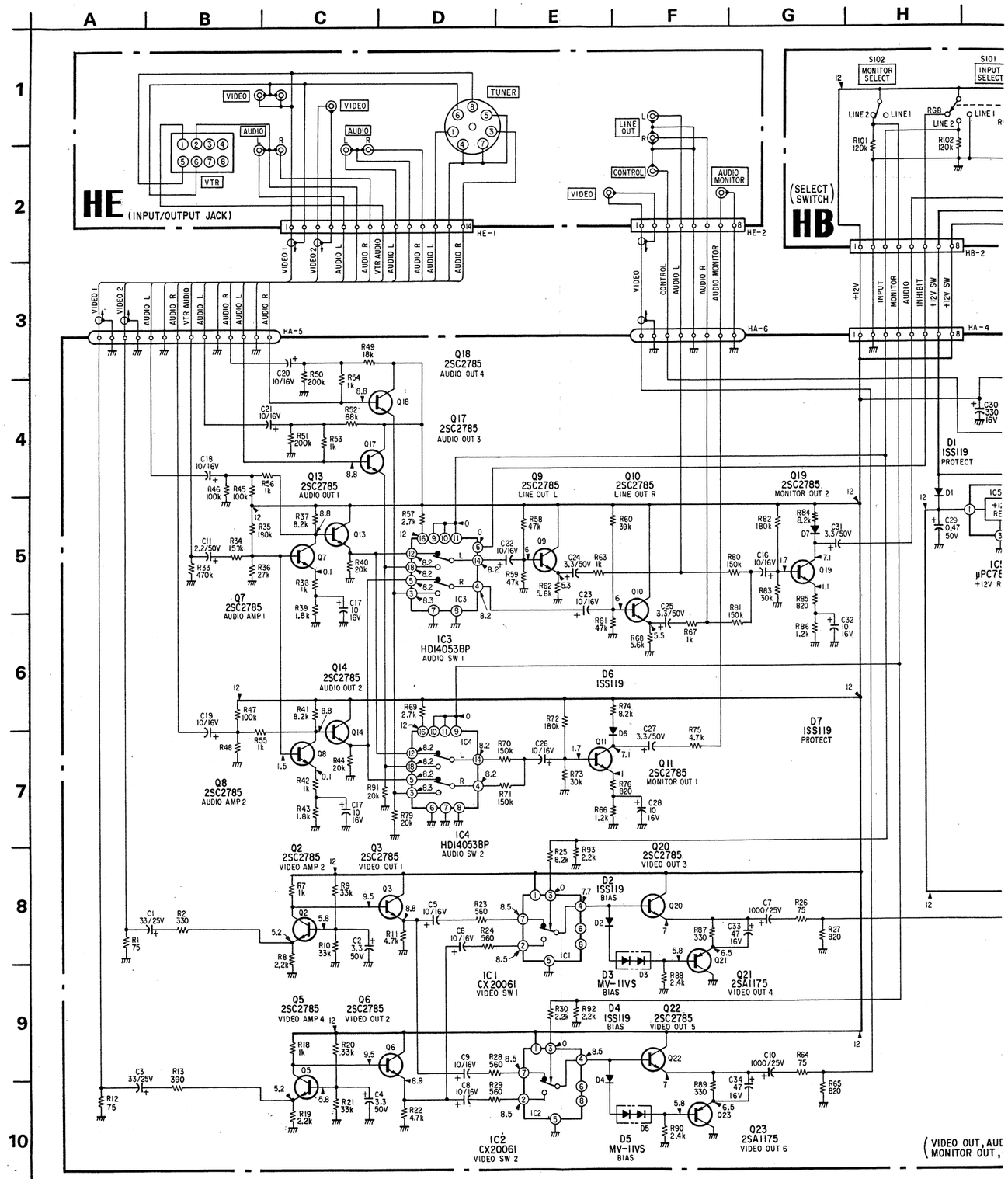
SEL2310G
TLG124

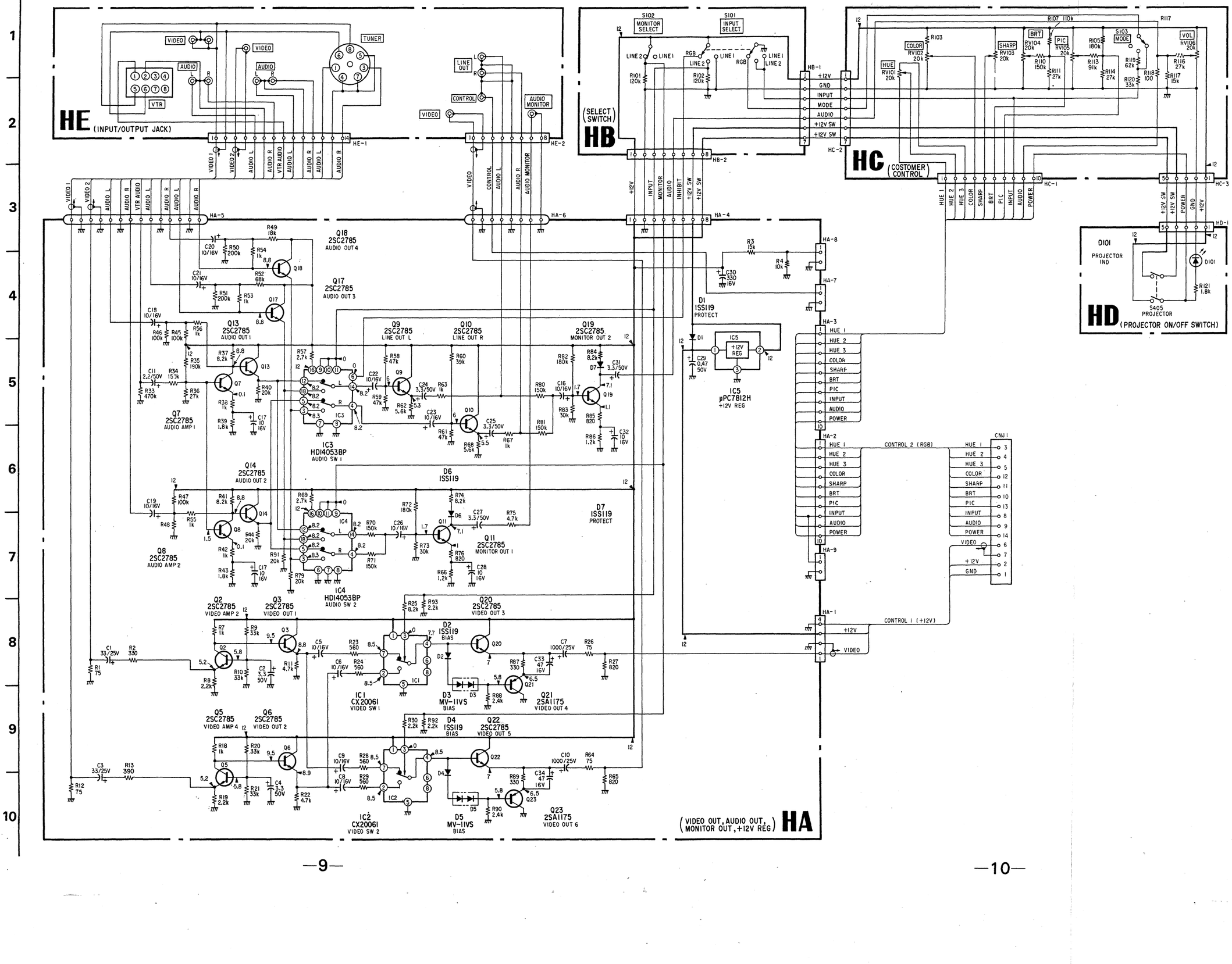


2-4. SCHEMATIC DIAGRAM

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics.
- All resistors are in ohms, ¼ W unless otherwise noted. k: 1000 Ω, M: 1000 kΩ.
- ▭ : panel designation.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- Switch position:
  INPUT SELECT . . . . . .LINE 1
  MONITOR SELECT . . . .LINE 1
  BLUE MODE SELECT . . .NORMAL
  PROJECTOR . . . . . .ON
- All voltages are in V.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a 10 MΩ digital multimeter.
- Readings are taken with a color-bar signal input.
- ——— : B + bus.
- Voltage variations may be noted due to normal production tolerances.




HE (INPUT/OUTPUT JACK)
HB (SELECT SWITCH)
HC (COSTOMER CONTROL)
HD (PROJECTOR ON/OFF SWITCH)
HA (VIDEO OUT, AUDIO OUT, MONITOR OUT, +12V REG)
S102 MONITOR SELECT
S101 INPUT SELECT
S103 MODE
S405 PROJECTOR
D101 PROJECTOR IND
D1 1SS119 PROTECT
D7 1SS119 PROTECT
IC5 µPC7812H +12V REG
IC1 CX20061 VIDEO SW 1
IC2 CX20061 VIDEO SW 2
IC3 HD14053BP AUDIO SW 1
IC4 HD14053BP AUDIO SW 2
Q7 2SC2785 AUDIO AMP 1
Q8 2SC2785 AUDIO AMP 2
Q13 2SC2785 AUDIO OUT 1
Q14 2SC2785 AUDIO OUT 2
Q17 2SC2785 AUDIO OUT 3
Q18 2SC2785 AUDIO OUT 4
Q9 2SC2785 LINE OUT L
Q10 2SC2785 LINE OUT R
Q11 2SC2785 MONITOR OUT 1
Q19 2SC2785 MONITOR OUT 2
Q2 2SC2785 VIDEO AMP 2
Q3 2SC2785 VIDEO OUT 1
Q5 2SC2785 VIDEO AMP 4
Q6 2SC2785 VIDEO OUT 2
Q20 2SC2785 VIDEO OUT 3
Q22 2SC2785 VIDEO OUT 5
Q21 2SA1175 VIDEO OUT 4
Q23 2SA1175 VIDEO OUT 6
D2 1SS119 BIAS
D3 MV-1IVS BIAS
D4 1SS119 BIAS
D5 MV-1IVS BIAS
D6 1SS119
CONTROL 2 (RGB)
CONTROL 1 (+12V)
+12V
VIDEO
GND
CNJ1

2-5. PRINTED WIRING BOARD

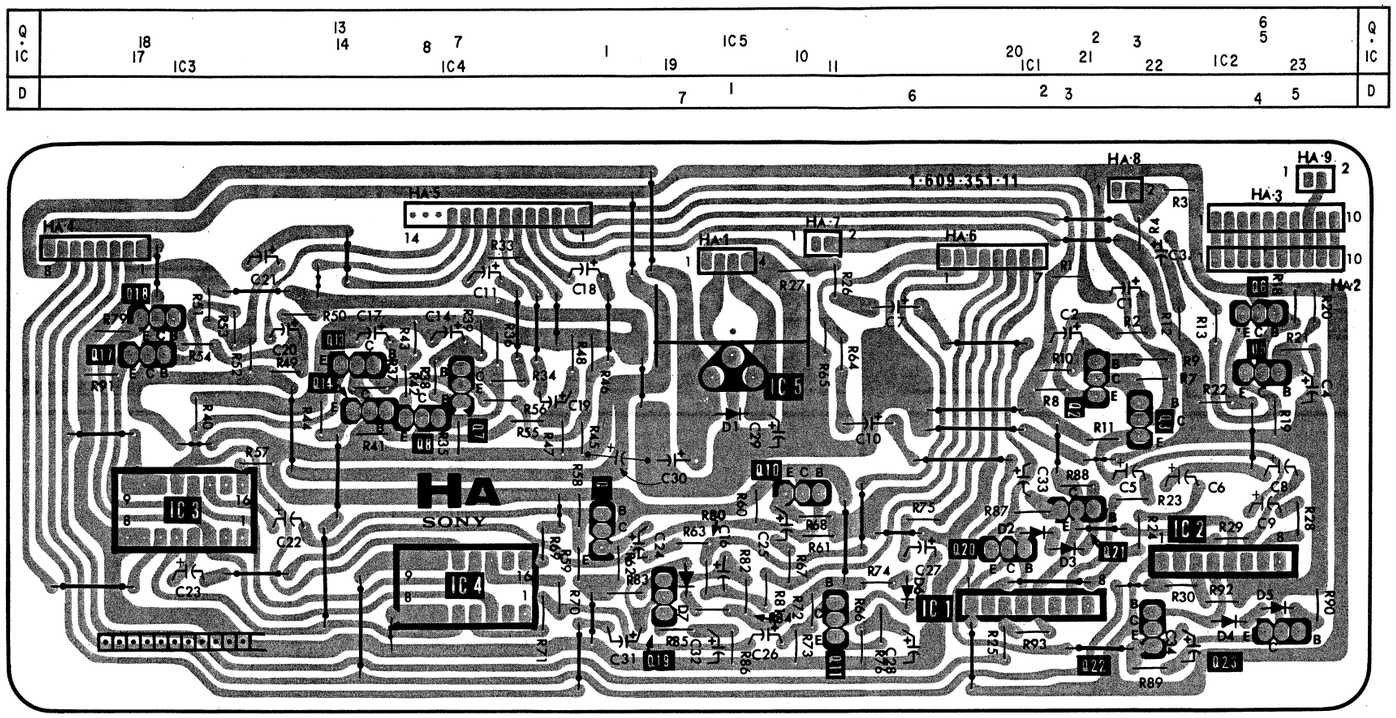
– Conductor Side –

HA [VIDEO OUT, AUDIO OUT, MONITOR OUT, +12V REG.] **HB** [SELECT SWITCH]

A B C D E F G H I J K L M N O

1 2 3 4 5

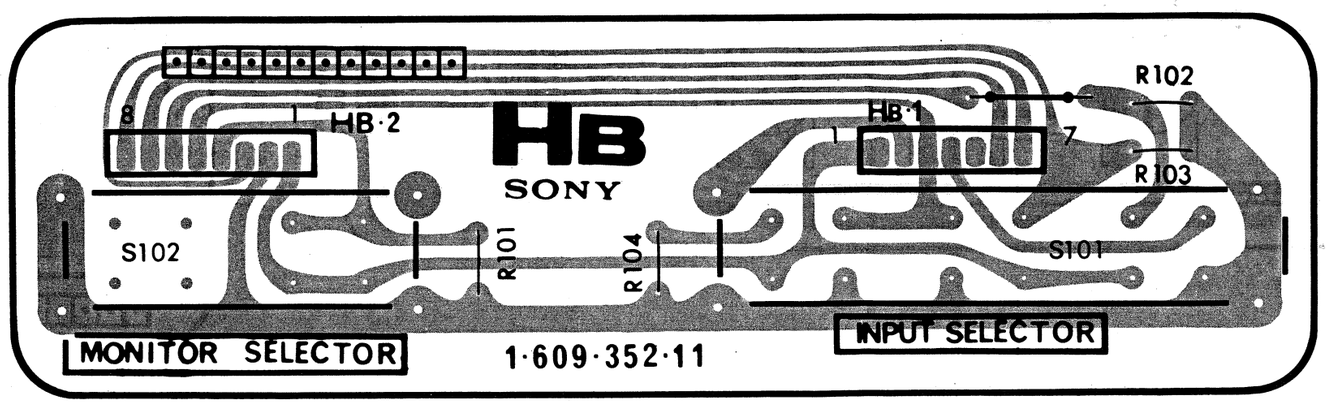
– HA Board –



6

– HB Board –

7 8 9 10

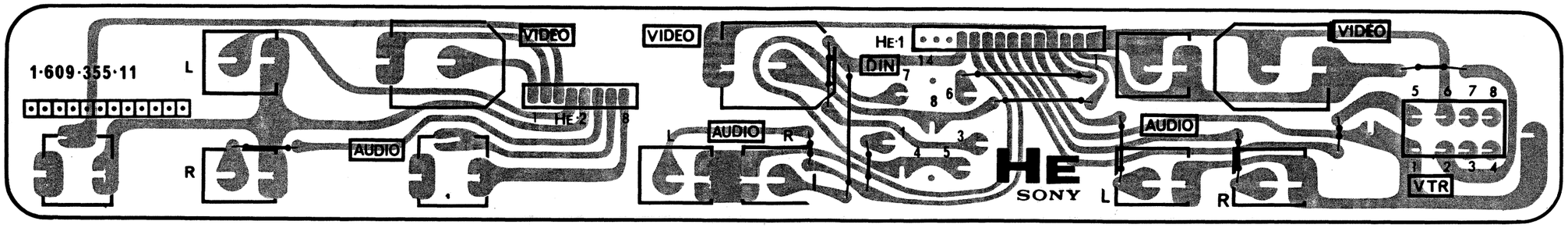


HC [CUSTOMER CONTROL] **HD** [PROJECTOR ON/OFF SWITCH] **HE** [INPUT/OUTPUT JACK]

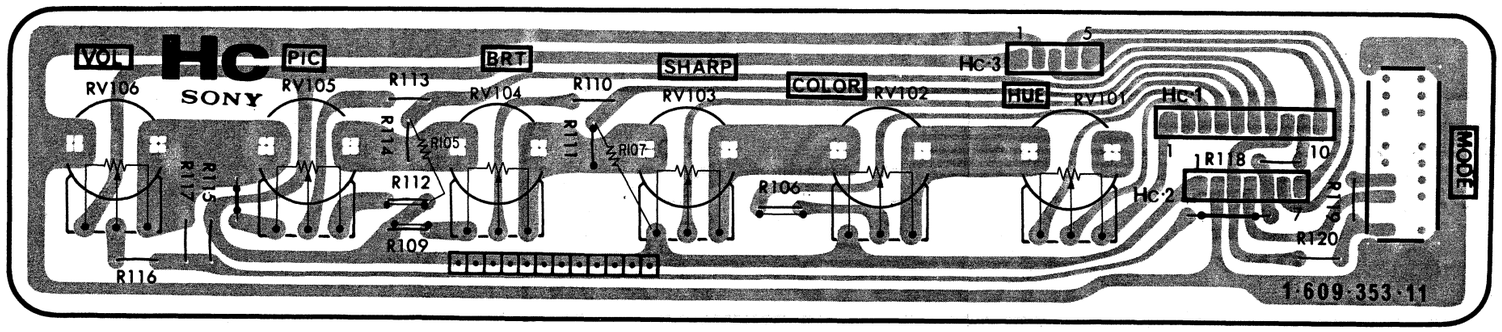
A B C D E F G H I J K L M N O

1 2 3 4 5 6 7 8 9 10

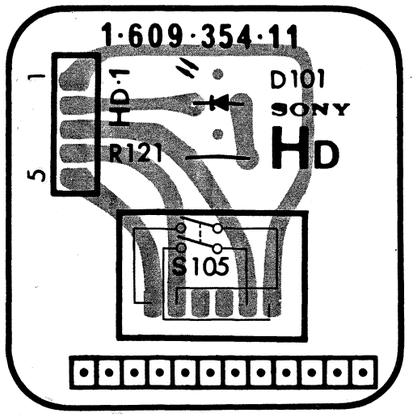
– HE Board –



– HC Board –



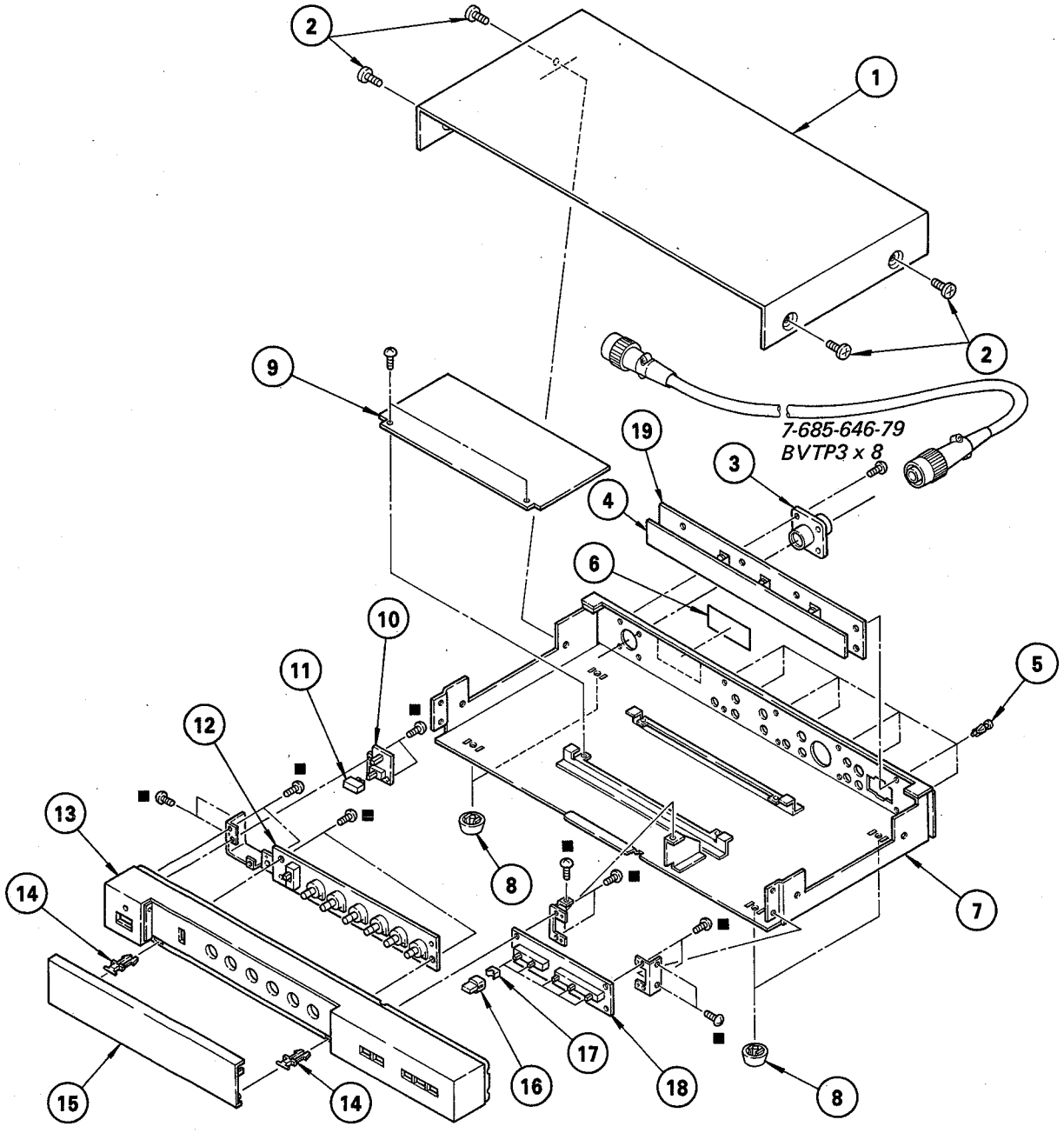
– HD Board –



SECTION 3
EXPLODED VIEW

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " ♦ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

■ : TA, BV3 x 8 7-685-646-71



No.	Part No.	Description	Remark
1	2-380-908-00	CABINET	
2	4-847-802-11	SCREW, CASE STOPPER	
3	1-556-936-00	CONNECTOR ASSY, MULTI	
4	♦:1-609-355-00	HE BOARD	
5	4-812-134-11	RIVET NYLON, 3.5	
6	♦:2-380-904-00	LABEL, MODEL NUMBER	
7	♦:X-2380-903-0	CHASSIS ASSY	
8	X-3701-069-0	FOOT ASSY, M.F	
9	♦:A-1370-810-A	HA BOARD, COMPLETE	
10	♦:1-609-354-00	HD BOARD	
11	A-1499-198-A	KNOB ASSY, POWER	
12	♦:1-609-353-00	HC BOARD	
13	X-2380-902-0	PANEL ASSY, CONTROL	
14	3-703-035-21	SHAFT, DOOR	
15	X-2380-901-0	DOOR ASSY, SUB CONTROL	
16	2-363-012-00	KNOB (6X14), CORNER	
17	4-864-307-00	RING	
18	♦:1-609-352-00	HB BOARD	
19	1-536-792-00	TERMINAL BOARD, INPUT/OUTPUT	

SECTION 4
ELECTRICAL PARTS LIST

When indicating parts by reference number, please include the board name.

• Items marked " ♦ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

• All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

CAPACITORS
• MF : μF, PF : μμF

RESISTORS
• All resistors are in ohms.
• F : nonflammable

COILS
• MMH : mH, UH : μH

Ref.No.	Part No.	Description			Remark
	♦:A-1370-810-A	HA BOARD, COMPLETE **********			
	♦:1-941-005-02	CONNECTOR ASSY, BOARD IN 8P			
	♦:4-863-132-00	HEAT SINK (SMALL)			
		CAPACITOR			
C1	1-123-331-00	ELECT 33MF	20%	25V	
C2	1-123-382-00	ELECT 3.3MF	20%	50V	
C3	1-123-331-00	ELECT 33MF	20%	25V	
C4	1-123-382-00	ELECT 3.3MF	20%	50V	
C5	1-123-356-00	ELECT 10MF	20%	16V	
C6	1-123-356-00	ELECT 10MF	20%	16V	
C7	1-123-337-00	ELECT 1000MF	20%	25V	
C8	1-123-356-00	ELECT 10MF	20%	16V	
C9	1-123-356-00	ELECT 10MF	20%	16V	
C10	1-123-337-00	ELECT 1000MF	20%	25V	
C11	1-123-381-00	ELECT 2.2MF	20%	50V	
C14	1-123-356-00	ELECT 10MF	20%	16V	
C16	1-123-356-00	ELECT 10MF	20%	16V	
C17	1-123-356-00	ELECT 10MF	20%	16V	
C18	1-123-356-00	ELECT 10MF	20%	16V	
C19	1-123-356-00	ELECT 10MF	20%	16V	
C20	1-123-356-00	ELECT 10MF	20%	16V	
C21	1-123-356-00	ELECT 10MF	20%	16V	
C22	1-123-356-00	ELECT 10MF	20%	16V	
C23	1-123-356-00	ELECT 10MF	20%	16V	
C24	1-123-382-00	ELECT 3.3MF	20%	50V	
C25	1-123-382-00	ELECT 3.3MF	20%	50V	
C26	1-123-356-00	ELECT 10MF	20%	16V	
C27	1-123-382-00	ELECT 3.3MF	20%	50V	
C28	1-123-356-00	ELECT 10MF	20%	16V	
C29	1-123-379-00	ELECT 0.47MF	20%	50V	
C30	1-123-322-00	ELECT 330MF	20%	16V	
C31	1-123-382-00	ELECT 3.3MF	20%	50V	
C32	1-123-356-00	ELECT 10MF	20%	16V	
C33	1-123-332-00	ELECT 47MF	20%	16V	
C34	1-123-332-00	ELECT 47MF	20%	16V	
		DIODE			
D1	8-719-911-19	DIODE 1SS119			
D2	8-719-911-19	DIODE 1SS119			
D3	8-719-901-27	DIODE MV-11VS			
D4	8-719-911-19	DIODE 1SS119			
D5	8-719-901-27	DIODE MV-11VS			
D6	8-719-911-19	DIODE 1SS119			
D7	8-719-911-19	DIODE 1SS119			
		CONNECTOR			
HA1	♦:1-560-460-00	PIN, CONNECTOR 4P			
HA2	♦:1-560-471-00	PIN, CONNECTOR 10P			
HA3	♦:1-560-471-00	PIN, CONNECTOR 10P			
HA4	♦:1-560-470-00	PIN, CONNECTOR 8P			
HA7	♦:1-560-456-00	PIN, CONNECTOR 2P			
HA8	♦:1-560-456-00	PIN, CONNECTOR 2P			
HA9	♦:1-560-456-00	PIN, CONNECTOR 2P			
		IC			
IC1	8-750-000-74	IC CX20061			
IC2	8-752-000-74	IC CX20061			
IC3	8-759-340-53	IC HD14053BP			
IC4	8-759-340-53	IC HD14053BP			
IC5	8-759-170-12	IC UPC78M12H			
		TRNASISTOR			
Q2	8-729-245-83	TRANSISTOR 2SC2458			
Q3	8-729-245-83	TRANSISTOR 2SC2458			
Q5	8-729-245-83	TRANSISTOR 2SC2458			
Q6	8-729-245-83	TRANSISTOR 2SC2458			
Q7	8-729-245-83	TRANSISTOR 2SC2458			
Q8	8-729-245-83	TRANSISTOR 2SC2458			
Q9	8-729-245-83	TRANSISTOR 2SC2458			
Q10	8-729-245-83	TRANSISTOR 2SC2458			
Q11	8-729-245-83	TRANSISTOR 2SC2458			
Q13	8-729-245-83	TRANSISTOR 2SC2458			
Q14	8-729-245-83	TRANSISTOR 2SC2458			
Q17	8-729-245-83	TRANSISTOR 2SC2458			
Q18	8-729-245-83	TRANSISTOR 2SC2458			
Q19	8-729-245-83	TRANSISTOR 2SC2458			
Q20	8-729-245-83	TRANSISTOR 2SC2458			
Q21	8-729-204-83	TRANSISTOR 2SA1048-GR			
Q22	8-729-245-83	TRANSISTOR 2SC2458			
Q23	8-729-204-83	TRANSISTOR 2SA1048-GR			
		RESISTOR			
R1	1-247-804-00	CARBON	75	5% 1/6W	
R2	1-247-821-00	CARBON	390	5% 1/6W	
R3	1-247-859-00	CARBON	15K	5% 1/6W	
R4	1-247-855-00	CARBON	10K	5% 1/6W	
R7	1-247-831-00	CARBON	1K	5% 1/6W	
R8	1-247-839-00	CARBON	2.2K	5% 1/6W	
R9	1-247-867-00	CARBON	33K	5% 1/6W	
R10	1-247-867-00	CARBON	33K	5% 1/6W	
R11	1-247-847-00	CARBON	4.7K	5% 1/6W	
R12	1-247-804-00	CARBON	75	5% 1/6W	
R13	1-247-821-00	CARBON	390	5% 1/6W	
R18	1-247-831-00	CARBON	1K	5% 1/6W	
R19	1-247-839-00	CARBON	2.2K	5% 1/6W	
R20	1-247-867-00	CARBON	33K	5% 1/6W	
R21	1-247-867-00	CARBON	33K	5% 1/6W	
R22	1-247-847-00	CARBON	4.7K	5% 1/6W	
R23	1-247-825-00	CARBON	560	5% 1/6W	
R24	1-247-825-00	CARBON	560	5% 1/6W	
R25	1-247-839-00	CARBON	2.2K	5% 1/6W	
R26	1-247-804-00	CARBON	75	5% 1/6W	
R27	1-247-829-00	CARBON	820	5% 1/6W	

Ref.No.	Part No.	Description				Remark
R28	1-247-825-00	CARBON	560	5%	1/6W	
R29	1-247-825-00	CARBON	560	5%	1/6W	
R30	1-247-839-00	CARBON	2.2K	5%	1/6W	
R33	1-247-895-00	CARBON	470K	5%	1/6W	
R34	1-247-883-00	CARBON	150K	5%	1/6W	
R35	1-247-885-00	CARBON	180K	5%	1/6W	
R36	1-247-865-00	CARBON	27K	5%	1/6W	
R37	1-247-853-00	CARBON	8.2K	5%	1/6W	
R38	1-247-831-00	CARBON	1K	5%	1/6W	
R39	1-247-837-00	CARBON	1.8K	5%	1/6W	
R40	1-247-862-00	CARBON	20K	5%	1/6W	
R41	1-247-853-00	CARBON	8.2K	5%	1/6W	
R42	1-247-831-00	CARBON	1K	5%	1/6W	
R43	1-247-837-00	CARBON	1.8K	5%	1/6W	
R44	1-247-862-00	CARBON	20K	5%	1/6W	
R45	1-247-879-00	CARBON	100K	5%	1/6W	
R46	1-247-879-00	CARBON	100K	5%	1/6W	
R47	1-247-879-00	CARBON	100K	5%	1/6W	
R48	1-247-879-00	CARBON	100K	5%	1/6W	
R49	1-247-875-00	CARBON	68K	5%	1/6W	
R50	1-247-886-00	CARBON	200K	5%	1/6W	
R51	1-247-886-00	CARBON	200K	5%	1/6W	
R52	1-247-875-00	CARBON	68K	5%	1/6W	
R53	1-247-831-00	CARBON	1K	5%	1/6W	
R54	1-247-831-00	CARBON	1K	5%	1/6W	
R55	1-247-831-00	CARBON	1K	5%	1/6W	
R56	1-247-831-00	CARBON	1K	5%	1/6W	
R57	1-247-841-00	CARBON	2.7K	5%	1/6W	
R58	1-247-871-00	CARBON	47K	5%	1/6W	
R59	1-247-871-00	CARBON	47K	5%	1/6W	
R60	1-247-871-00	CARBON	47K	5%	1/6W	
R61	1-247-871-00	CARBON	47K	5%	1/6W	
R62	1-247-849-00	CARBON	5.6K	5%	1/6W	
R63	1-247-831-00	CARBON	1K	5%	1/6W	
R64	1-247-804-00	CARBON	75	5%	1/6W	
R65	1-247-829-00	CARBON	820	5%	1/6W	
R66	1-247-833-00	CARBON	1.2K	5%	1/6W	
R67	1-247-831-00	CARBON	1K	5%	1/6W	
R68	1-247-849-00	CARBON	5.6K	5%	1/6W	
R69	1-247-841-00	CARBON	2.7K	5%	1/6W	
R70	1-247-883-00	CARBON	150K	5%	1/6W	
R71	1-247-883-00	CARBON	150K	5%	1/6W	
R72	1-247-885-00	CARBON	180K	5%	1/6W	
R73	1-247-866-00	CARBON	30K	5%	1/6W	
R74	1-247-853-00	CARBON	8.2K	5%	1/6W	
R75	1-247-847-00	CARBON	4.7K	5%	1/6W	
R76	1-247-829-00	CARBON	820	5%	1/6W	
R79	1-247-862-00	CARBON	20K	5%	1/6W	
R80	1-247-883-00	CARBON	150K	5%	1/6W	
R81	1-247-883-00	CARBON	150K	5%	1/6W	
R82	1-247-885-00	CARBON	180K	5%	1/6W	
R83	1-247-866-00	CARBON	30K	5%	1/6W	
R84	1-247-853-00	CARBON	8.2K	5%	1/6W	
R85	1-247-829-00	CARBON	820	5%	1/6W	
R86	1-247-833-00	CARBON	1.2K	5%	1/6W	
R87	1-247-819-00	CARBON	330	5%	1/6W	
R88	1-247-840-00	CARBON	2.4K	5%	1/6W	
R89	1-247-819-00	CARBON	330	5%	1/6W	
R90	1-247-840-00	CARBON	2.4K	5%	1/6W	
R91	1-247-862-00	CARBON	20K	5%	1/6W	
R92	1-247-839-00	CARBON	2.2K	5%	1/6W	
R93	1-247-839-00	CARBON	2.2K	5%	1/6W	

****

♣:1-609-352-00 HB BOARD
****

♣:1-941-005-03 CONNECTOR ASSY, MICRO (2MM) 8P
♣:1-941-005-04 CONNECTOR ASSY, BOARD IN 7P

RESISTOR

R101	1-247-881-00	CARBON	120K	5%	1/6W
R102	1-247-881-00	CARBON	120K	5%	1/6W
R103	1-247-881-00	CARBON	120K	5%	1/6W
R104	1-247-881-00	CARBON	120K	5%	1/6W

SWITCH

S101	1-554-500-00	SWITCH, PUSH (3 KEY)
S102	1-554-499-00	SWITCH, PUSH (2 KEY)

****

♣:1-609-353-00 HC BOARD
****

♣:1-941-005-05 CONNECTOR ASSY, MICRO (2MM) 10P
♣:1-941-005-06 CONNECTOR ASSY, BOARD IN 5P

RESISTOR

R105	1-247-885-00	CARBON	180K	5%	1/6W
R107	1-246-522-00	CARBON	110K	1%	1/4W
R110	1-247-883-00	CARBON	150K	5%	1/6W
R111	1-247-865-00	CARBON	27K	5%	1/6W
R113	1-247-878-00	CARBON	91K	5%	1/6W
R114	1-247-865-00	CARBON	27K	5%	1/6W
R116	1-247-865-00	CARBON	27K	5%	1/6W
R117	1-247-859-00	CARBON	15K	5%	1/6W
R118	1-247-807-00	CARBON	100	5%	1/6W
R119	1-247-874-00	CARBON	62K	5%	1/6W
R120	1-247-867-00	CARBON	33K	5%	1/6W

VARIABLE RESISTOR

RV101	1-228-583-00	RES, VAR, CARBON 20K
RV102	1-228-582-00	RES, VAR, CARBON 20K
RV103	1-228-582-00	RES, VAR, CARBON 20K
RV104	1-228-582-00	RES, VAR, CARBON 20K
RV105	1-228-582-00	RES, VAR, CARBON 20K

Ref.No.	Part No.	Description	Remark
RV106	1-228-583-00	RES, VAR, CARBON 20K	
		SWITCH	
S103	1-514-633-00	SLIDE SWITCH	
**********			
♦:	1-609-354-00	HD BOARD ********	
♦:	4-347-508-00	HOLDER, LED	
		DIODE	
D101	8-719-812-43	DIODE TLG124	
		RESISTOR	
R121	1-247-837-00	CARBON 1.8K 5% 1/6W	
		SWITCH	
S105	1-552-737-00	SWITCH, PUSH	
**********			
♦:	1-609-355-00	HE BOARD ********	
	1-536-792-00	TERMINAL BOARD, INPUT/OUTPUT	
**********			
		MISCELLANEOUS **********	
	1-556-936-00	CONNECTOR ASSY, MULTI	
♦:	1-941-005-07	CONNECTOR ASSY, MICRO (2MM) 2P	
**********			

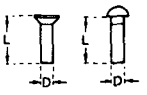
ACCESSORIES AND PACKING MATERIALS
****

Part No.	Description	Remark
2-380-912-00	INDIVIDUAL CARTON	
2-380-913-00	SPACER	
2-380-914-00	CUSHION	
4-357-916-00	BAG, PROTECTION	
4-493-834-11	MANUAL, INSTRUCTION	

HARDWARE NOMENCLATURE

Screw: P 3 x 10

- *L: Length in mm*
- *D: Diameter in mm*
- *Type of head*
- *Indicated slotted-head only. Unless otherwise indicated, it means cross-recessed head (Phillips type).*



Nut, Washer, Retaining ring: N 3

- *Diameter of usable screw or shaft*
- *Reference designation*

Reference Designation	Shape	Description	Remarks
		SCREWS	
P		pan-head screw	binding-head (B) screw for replacement
PWH		pan-head screw with washer face	binding-head (B) screw and flat washer for replacement
PS PSP		pan-head screw with spring washer	binding-head (B) screw and spring washer for replacement
PSW PSPW		pan-head screw with spring and flat washers	binding-head (B) screw and spring and flat washers for replacement
R		round-head screw	binding-head (B) screw for replacement
K		flat-countersunk-head screw	
RK		oval-countersunk-head screw	
B		binding-head screw	
T		truss-head screw	binding-head (B) screw for replacement
F		flat-fillister-head screw	
RF		fillister-head screw	
BV		brazier-head screw	

Reference Designation	Shape	Description	Remarks
		SELF-TAPPING SCREWS	
TA		self-tapping screw	ex: TA, P 3 x 10
PTP		pan-head self-tapping screw	binding-head self-tapping (TA, B) screw for replacement
PTPWH		pan-head self-tapping screw with washer face	binding-head self tapping (TA, B) screw and flat washer for replacement
PTTWH		pan-head thread-rolling screw with washer face	binding-head (B) screw and flat washer for replacement
		SET SCREWS	
SC		set screw	
SC		hexagon-socket set screw	ex: SC 2.6 x 4, hexagon socket
		NUT	
N		nut	
		WASHERS	
W		flat washer	
SW		spring washer	
LW		internal-tooth lock washer	ex: LW3, internal
LW		external-tooth lock washer	ex: LW3, external
		RETAINING RINGS	
E		retaining ring	
G		grip-type retaining ring	

VPR-722

SONY
SERVICE MANUAL

E Model
Serial No. 5003961 and later
No. 1

SUPPLEMENT

SUBJECT: MODIFICATION OF EXPLODED VIEWS

File this supplement with Service Manual.

INTRODUCTION

1. KNOB POWER have been modified.

EXPLODED VIEW

Part No.	Description
2-389-622-01	KNOB POWER

MICROFILM
9-963-112-81

Sony Corporation
TV Group

ACC

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